

### **REMARKS/ARGUMENTS**

The Applicant appreciates the time and consideration for the telephonic interview taken by Examiner Lashley and Supervisory Examiner Barron to discuss proposed amendments to the pending claims on or about August 21, 2007. At the express suggestion by the Office the proposed amendment[s] are presented here to more particularly describe the claims and expedite allowance of the pending claims. No new matter is introduced by this amendment and the amendment is fully supported by the originally filed specification. During the interview with Examiner Lashley and Supervisory Examiner Barron, Claims 6-21 and Claims 30-31 and the prior art were discussed. Namely, the Allen, Auerbach & Blakely citations were discussed.

Claim 6, as discussed during the interview, is listed above, and recited here:

“A method for protecting a digital signal, comprising the steps of:

providing a digital signal comprising digital data and file format information defining how the digital signal is encoded;

creating a predetermined key to manipulate the digital signal;

and

manipulating the digital signal using the predetermined key to generate at least one permutation of the digital signal parameterized by the file format information defining how the digital signal is encoded.”

As discussed during the interview, Allen allegedly describes data reduction; Auerbach allegedly describes cryptolopes; and, Blakely allegedly describes a mask. “In view of the Applicant's proposed amendments, the Examiner made the determination that the prior art of record had been overcome.” A [f]urther search and consideration” was confirmed. Applicant thus respectfully requests withdrawal of the rejections and allowance of the claims. The Applicant presents the following arguments to preserve for the record why the claims are patentable over Allen in view of Auerbach and in further view of Blakely as directed by the Office.

It is the Applicants' position that one of ordinary skill in the art would have read the claim language as originally presented but at the Office's express

Appl'n No. 10/602,777

Responsive Amendment dated August 31, 2007

Reply to non-final Office Action of May 31, 2007

request for clarification, Applicant revised the claim[s]. The clarification[s] are not meant to result in any prosecution history estoppel.

**Rejections under 35 U.S.C. § 103**

In order to "establish a prima facie case of obviousness, three basic criteria must be met." MPEP § 706.02(j):

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. 'To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections."

Applicant submits that the Office Action has failed to establish a *prima facie* case of obviousness to the extent that the citations do not teach or suggest all of the claim elements. This was conceded in the Interview on or about August 21, 2007.

Second, there is no motivation or suggestion to make the proposed combinations of the citations as directed by the Office. More particularly, there is no motivation to combine Allen with Auerbach. Similarly, there is no motivation to combine Allen with Auerbach and/or Blakely. The Federal Circuit has emphasized the importance of providing evidence of motivation to combine in *Winner Int'l Royalty Corp. v. Ching-Rong Wang*, 202 F. 3d 1340, 1348-49 (Fed. Cir. Jan. 27, 2000). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another . . . the showing of combinability, in whatever form, must nevertheless be 'clear and particular.'" *Winner*, 202 F. 3d at 1348-49 (citations omitted). Further, the "absence of such a

suggestion to combine is dispositive in an obviousness determination." *Gambro Lundia AB v. Baxter Healthcare Corp.*, 11 F.3d 1573, 1579 (Fed. Cir. 1997).

Instead, it appears that the Office Action identifies citations without reference to the elements of the claims, and has combined them. Even assuming *arguendo* that the references contained all elements of the claimed invention, it is still impermissible to reject a claim that would *allegedly* have been obvious simply "by locating references which describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done." *Ex parte Levengood*, 28 USPQ2d 1300, 1303 (Bd. Pat. App. & Inter. 1993) [emphasis added]. Applicant submits that the Office has not satisfied the initial burden "to provide some suggestion of the desirability of doing what the inventor has done" MPEP § 706.02(j).

Last, *for argument's sake*, even if the claim elements did teach or suggest all of the claim elements there is no reasonable expectation of success in combining the citations as suggested by the Office Action. The suggested combination[s] are not a "predictable use of prior art elements according to their established functions" (*KSR* Opinion at Page 13). For at least these reasons, Applicant respectfully requests the Section 103 rejections of Claims 6-21 & 30-31 be withdrawn.

**1. a) 35 USC § 103(a) Rejections based on U.S. Patent No. 6,041,316 issued to Allen ("Allen") further in view of U.S. Patent No. 5,673,316 issued to Auerbach et al. ("Auerbach") as applied to Claims 6-7, 9-12 & 30-31**

Claims 6-7, 9-12 & 30-31 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Allen further in view of Auerbach. Office Action states [emphasis in original]:

... creating a predetermined key that manipulates (see column 6, lines 61-62: encryption key) {the file format information}; and manipulating {the file format information} using the predetermined key (see column 2, lines 44-48: encrypt portion of data to result in partially-degraded version of data; column 6, lines 60-64: encryption key used prior to decryption key; column 7, lines 45-55: method of manipulating portion *but does not explicitly disclose* the digital signal comprising digital data and file format information. US '3316 [Auerbach] however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3-5 & 10-18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted)... (May 31, 2007 non-final Office Action at Page 3).

Applicant respectfully traverses. Without conceding the propriety of the asserted combination, Applicant submits that the asserted combination does not disclose at least the following feature of claim 6 or claim 30, among other features, "creating a predetermined key", for at least the following reasons, Allen apparently teaches data reduction (Allen at Col. 7 ll. 65; Col. 6 ll. 30-38 and Figure 1) **not** key creation. In contrast with the claims, Allen's "partially degraded data" is *first* decrypted and then, *second*, combined with "remaining data" to "regenerate" or "reconstruct" the original data (Col. 5 ll. 2-20; Col. 6 ll. 60 – Col. 7 ll. 10; and Fig. 2 item 50). As is understood by one of ordinary skill in the art, keys directed specifically at encryption, besides not being expressly disclosed by Allen, are generated *independent* of the data to be encrypted. Thus, Allen teaches away from the claim[s], namely: "manipulating the digital signal using the predetermined key to generate at least one permutation of the digital signal parameterized by the file format information defining how the digital signal is encoded". Auerbach is cited for its alleged disclosure of various features of claim 6 and claim 30. Applicant respectfully submits that Auerbach does not add anything to Allen that would remedy the deficiency cited above. Auerbach allegedly teaches *wrapping* data with a "cryptographic envelope". The wrapping is *not* "file format information" as contended in the Office Action but an *additional* layer of encryption. Auerbach thus teaches away from Allen.

With regards to independent claim 30 (and all claims depending therefrom), the above remarks apply. Additionally, the claim element, "plurality of frames" (e.g., without limitation, MPEG frames, CD-DA frames, AAC frames, etc.) is ignored in all of the citations. Accordingly, for at least these reasons, reconsideration and withdrawal of the Section 103 rejection is respectfully requested.

Second, the Office has not presented "clear and particular" evidence of a motivating force. The Office Action appears to identify citations that allegedly disclose elements of the claims. This gives rise to impermissible hindsight, as there is clearly no motivation to combine Allen with Auerbach. Even assuming, *for argument's sake*, there was a motivation to make the proposed combination of Allen and Auerbach, the combination fails to disclose or suggest all of the terms of independent claim 6 (and all claims depending therefrom) and independent claim 30 (and all claims depending therefrom). Combining Allen with Auerbach would be improper as Auerbach's "cryptographic envelope" wraps data in cryptographic metadata. Again, this teaches away from making *keyed content* available to encourage broader access to information. In fact, the combination of Allen and Auerbach would likely increase the computational complexity of distributing data without any established benefit. Third, there is no reasonable likelihood of success. Applying Auerbach's "cryptolope" would logically result in a cryptographic wrapping of Allen's partially encrypted data – teaching away from the claims. In fact, a cryptolope makes manipulations of *cryptoloped* data *including* the wrapping itself computationally infeasible. It is thus respectfully submitted that there is no reasonable likelihood of success in combining these two citations, at least as suggested by the Office.

Last, a review of the Office Action makes clear that in each rejection, Allen and Auerbach are relied upon for those elements that are present in the independent claims as well as the dependent claims. Because the cited citations, either alone or in combination fail to disclose all of the claim elements, the Office has failed to establish a *prima facie* case for obviousness for all claims that depend from Claims 6 and 30. See MPEP § 2143.03: "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). For at least this reason, the Office has failed to establish a *prima facie* case of obviousness for all claims that depend from Claims 6 and 30. See MPEP § 2143.03 ("If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious."). Accordingly, for at least these reasons, Applicant respectfully requests withdrawal of the Section 103 rejection for Claims 6-7, 9-12 & 30.

**Comments regarding Claim 31**

Applicant respectfully points out that there are no rejections or objections specifically directed at Claim 31. Applicant maintains the arguments above overcome the asserted rejections. Applicant, thus, respectfully directs the Office to 37 C.F.R. § 1.104 (c)(2) "In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." Accordingly, for at least these reasons, and the reasons cited in connection with Claims 6-7, 9-12 & 30, Applicant respectfully requests issuance of a timely notice of allowability for the claims, including Claim 31.

**1. b) 35 USC § 103(a) Rejections based on U.S. Patent No. 6,041,316 issued to Allen ("Allen") in view of U.S. Patent No. 5,673,316 issued to Auerbach et al. ("Auerbach") further in view of U.S. Patent No. 5,677,952 issued to Blakely, III et al. ("Blakely") as applied to Claims 8 and 13-21**

Claims 8 & 13-21 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Allen in view of Auerbach further in view of Blakely. Office Action states [emphasis in original]:

... [f]or claim 20, US '1316 teaches: A method for protecting a digital signal, comprising the steps of: providing a digital signal comprising (see column 3, line 45: as performed by the digital data processor) {digital data and file format information}; creating a predetermined key (see column 6, lines 61-62: encryption key) {comprising a mask set}; manipulating {the file format information} using the predetermined key (see column 2, lines 44-48: encrypt portion of data to result in partially degraded version of data; column 6, lines 60-64: encryption key used prior to decryption key; column 7, lines 47-55: methods of manipulating portions); authenticating the predetermined key during playback of the digital data (see column 5, lines 27-31: message quality associated with payment; column 6, lines 55-59: authentication of encryption and decryption key pair; and metering the playback of the digital data to monitor content (see column 5, lines 38-43: royalty fee payment) *but does not explicitly* disclose the digital signal comprising mask sets. Auerbach et al. in US '3316 however does expressly disclose a digital signal comprising digital data and file format information (see column 4, lines 3-5 & 10-18: information document parts contain document type (equivalent to Applicant's digital data, e.g. music sample) and content type (equivalent to Applicant's file

format information, e.g. JPEG or MPEG file formats as valuable document parts to be encrypted) *but does not expressly disclose* a predetermined key comprising mask sets. Blakely, III et al. in US '952 however does disclose a predetermined key comprising mask sets (see column 5, lines 46-50: mask set associated with a secret key)..." (May 31, 2007 non-final Office Action at Pages 12-13).

Applicant traverses. Without conceding the propriety of the asserted combination, Applicant respectfully submits that the asserted combination does not disclose at least the following feature of claim 20, "authenticating the predetermined key during playback of the digital data", for at least the following reason, Allen and Auerbach in combination allegedly teaches *wrapping* data with a "cryptographic envelope". Thus, Allen and Auerbach, separately and in combination, teach away from the claims. Blakely does not cure this deficiency. Blakely's *alleged* mask set is not the "mask set" as recited in the claims, but [emphasis added] "...[m]ore particularly, **the mask** may depend on a value identification (ID) stored on the machine's disk (in the clear), where the ID is unique to each machine and may be a random number of a device serial number" (Col. 5 ll. 48-51). Blakely's mask acts to literally *mask the key*—it is not derived from a signal for which a predetermined key "comprising a mask set" is created. Because Blakely's mask is not the "mask set" of the claims it logically follows that the combination cannot teach or suggest "authenticating the predetermined key during playback of the digital data".

Second, the Office has not presented evidence of motivation to make the proposed combinations. Similar to the previous rejection[s], the Office Action appears to locate citations that allegedly disclose or suggest elements of the claims, and combines them without providing "clear and particular" evidence of a motivating force. Manipulating the arrangement, structure or encoding of a signal with a predetermined key – keyed content – is useful in providing security at lower computational cost. As disclosed, cryptographic techniques whether associated with keys, white box security, etc. are not mutually exclusive. By way of non-limiting example, "exact[ing] a measure of security" (Specification at ¶ 34) presents significant benefits over the art. It is reasonable to assert that the addition of Blakely to Allen & Auerbach teach away from the claims as no mask set is disclosed or suggested, as a required feature – let alone "authenticating the predetermined key during playback of the digital data". Therefore, for at least these reasons, Applicant respectfully requests reconsideration and withdrawal of the rejections.

Last, a review of the Office Action makes clear that in each rejection, Allen and Auerbach and Blakely are relied upon for those elements that are present in the independent claims as well as the dependent claims. Because the cited citations, either alone or in combination fail to disclose all of the claim elements, the Office has failed to establish a prima facie case for obviousness for all claims



Appl'n No. 10/602,777

Responsive Amendment dated August 31, 2007

Reply to non-final Office Action of May 31, 2007

that depend from Claims 6 & 20, namely Claims 8 & 13-19 & Claim 21, respectively. See MPEP § 2143.03: "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). For at least this reason, the Examiner has failed to establish a *prima facie* case of obviousness for all claims that depend from Claims 6 & 20. See MPEP § 2143.03 ("If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.").

Appl'n No. 10/602,777

Responsive Amendment dated August 31, 2007

Reply to non-final Office Action of May 31, 2007

**Conclusion**

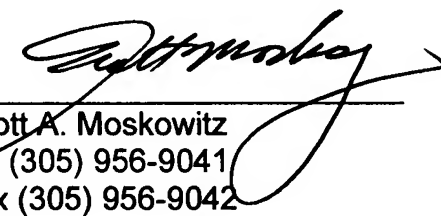
Applicant maintains that this application is in condition for allowance, and such disposition is earnestly solicited. Applicant's silence as to the Examiner's comments is not indicative of an acquiescence to the stated grounds of rejection. If the Examiner believes that an interview with the Applicant, either by telephone or in person, would further prosecution of this application, we would welcome the opportunity for such an interview.

It is believed that no other fees are required to ensure entry and consideration of this response.

Respectfully submitted,

Date: August 31, 2007

By:



\_\_\_\_\_  
Scott A. Moskowitz  
Tel (305) 956-9041  
Fax (305) 956-9042